



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

CW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,867	05/02/2001	Boguslaw A. Swedek	5252/451001	5820

32588 7590 06/25/2003
APPLIED MATERIALS, INC.
2881 SCOTT BLVD. M/S 2061
SANTA CLARA, CA 95050

EXAMINER

GRANT, ALVIN J

ART UNIT PAPER NUMBER

3723

DATE MAILED: 06/25/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

N.K.

Office Action Summary

Applicati n N .

09/847,867

Applicant(s)

SWEDEK ET AL.

Examiner

Alvin J Grant

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 18-20 is/are objected to.
- 8) ☒ Claim(s) 6-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other:

Election/Restrictions

1. Applicant's election without traverse of Group I in Paper No. 9 is acknowledged.

Claims 6-15 are withdrawn from consideration; and claims 1-5 and 16-20 are pending.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. **Claims 1, 2, 4, 16 and 17** are rejected under 35 U.S.C. 102(e) as being anticipated by Lehman et al. '541.

Lehman et al. discloses a chemical mechanical polishing apparatus comprising: a platen to support a polishing surface (**column 5, line 39**); an eddy current monitoring system (**column 5, lines 51-64**); an optical monitoring system (**column 5, line 26**); circuitry in the platen; a computer (**column 5, lines 51-64**); the platen is rotatable (**column 5, lines 42-44**); combining a first and a second signal into a third signal (**column 6, lines 7-21**); a carrier head to hold a substrate having a conductive layer disposed thereon in contact with the polishing surface (**column 3, lines 45-56**); a motor (**column 10, lines 40-43**); an eddy current monitoring system including an inductor (**column 7, lines 43-45**); and a sensor to

Art Unit: 3723

measure the strength of the magnetic field and a phase difference between the magnetic field and the drive signal (column 5, lines 64-66; and column 6, lines 7-48).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 3 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehman et al.

Art Unit: 3723

Lehman et al. is described above. Referring to claim 2, Lehman et al. does not specifically disclose an electrical union wherein the output line passes through the rotary electrical union between the circuitry and the computer. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made have used an electrical wherein the output line passes through the rotary electrical union between the circuitry and the computer, in the apparatus of Lehman et al., since applicant has not disclosed that an electrical union wherein the output line passes through the rotary electrical union between the circuitry and the computer solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the apparatus of Lehman et al.

Referring to claim 5, Lehman et al. does not specifically state that the circuitry assembles data from the first and second signals into packets, and the computer extracts data from the packets. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the circuitry of Lehman et al. to assemble data from the first and second signals into packets since the examiner takes Official Notice of the equivalence of assembling data from the first and second signals into packets, and the computer extracting data from the packets; and the signal data being stored in memory and then retrieved subsequently therefrom by the computer for their use in the CMP art and the selection of any of these known equivalents to store and retrieve data would be within the level of ordinary skill in the art.

Allowable Subject Matter

6. Claims 18-20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J Grant whose telephone number is (703) 305-3315. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail can be reached on (703) 308-2687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1184.

ajg
June 14, 2003

A handwritten signature in black ink, appearing to read "Joseph J. Hail, III". The signature is stylized with a large, flowing "J" and "H".

Joseph J. Hail, III
Supervisory Patent Examiner
Technology Center 3700